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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,353	02/14/2001	Franklin Sadler Love III	41012/208363	1080

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EXAMINER

HONG, JOHN C

ART UNIT PAPER NUMBER

3726

DATE MAILED: 10/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/783,353

Applicant(s)

LOVE ET AL.

Examiner

John C. Hong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-67 and 69-91 is/are pending in the application.
- 4a) Of the above claim(s) 1-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 63-67 and 69-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim s 63,66,67 and 72-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krejcik (U.S. Patent 6,478,662) in view of Nelson et al. (U.S. Patent 6,088,895).

Krejcik teaches a continuous method of descaling a layer of scale on an advancing metal surface without the use of caustic materials, the method comprising: advancing a metal surface along a predetermined path of travel; cracking the layer of scale by spraying smooth-edged media under fluid pressure at the surface of advancing metal (col. 1, lines 14-28; col.3, lines 8-57; col. 4, lines 9-16; col. 5, lines 41-43; col. 8, lines 44-51) .

Krejcik fails to teach the step of abrading the cracked layer of scale to remove the scale, thereby forming a descaled metal surface.

Nelson et al. teach the step of abrading the cracked layer of scale to remove the scale, thereby forming a descaled metal surface (col. 6, lines 7-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the step of abrading the cracked layer of scale to remove the scale, thereby forming a descaled metal surface, as taught by nelson et al. on the method of Krejcik so as to produce a white or matte surface.

Specially claimed SEM/EDS percent residual surface oxygen measurement and residual particle contents are considered to have been obvious matters of choice, since it has been held that discovering an optimum value of result effective variable involves only routine skill in the art. Regarding claims 2-4, specifically claimed weight and diameter of coils are considered to have been obvious matters of choice, since it has been held that discovering an optimum value of result effective variable involves only routine skill in the art. *in re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

3. Claims 69-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prejick/nelson et al. as applied to claim 63 above, and further in view of Barrier et al. (U.S. Patent 6,126,516) and Applicant's admitted prior art (AAPA).

Prejick/Nelson et al. teach the limitations as claimed above with the exception of the cracking step comprises spraying ceramic beads at the metal surface having a mean particle diameter within a range of .25mm to 1mm (.07mm to 0.14mm).

Barrier et al. teaches the cracking step comprises spraying ceramic beads at the metal surface (col. 1, lines 63-65) and AAPA (Specification page 12, line 22- page 13, line 7) teaches ceramic beads having a mean particle diameter within a range of .25mm to 1mm (.07mm to 0.14mm).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the cracking step comprises spraying ceramic beads at the metal surface having a mean particle diameter within a range of .25mm to 1mm (.07mm to 0.14mm), as

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taught by barrier et al. and AAPA on the method of Prejcik/Nelson et al. so as to remove rust and clean the metal surface .

***Response to Arguments***

4. Applicant's arguments with respect to claims 63-67 and 69-91 have been considered but are moot in view of the new ground(s) of rejection. See the above Office action.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C. Hong whose telephone number is 703-305-0779. The examiner can normally be reached on M-F(07:00-16:30)First Friday Off.

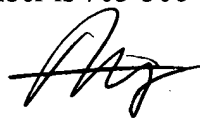
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1078.



John C. Hong  
Primary Examiner  
Art Unit 3726

jh  
September 28, 2003